

Appl. No. 10/759,342

Amdt. dated July 8, 2005

Reply to Office action of April 22, 2005

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-8 remain in the application. Claims 1 and 2 have been amended.

Support for the amendments is found in the original specification. For example, the figure illustrates heat storage devices Ia to Va that are each connected to a respective consumer I to IV and Vb. The heat storage devices are described in an exemplary temperature distribution to contain heat (heat energy Q) at 40°C, 30°C, 20°C, and 12°C. See page 11, bottom, and page 12, top. The heat reservoirs or heat storage devices, as described in the specification, are indeed "heat" reservoirs, as opposed to "cooling" sources. The term "heat" is used here in a thermodynamic sense as being synonymous for +Q (a heat spender) and the term "cooling" is used as synonymous for -Q (a heat sink).

This brings us to the art rejection. Claims 1-4 and 6-8 were rejected as being obvious over a combination of Schwarz (US 5,788,149) with either McGregor (US 4,299,277) or Bradshaw (US 4,173,125) under 35 U.S.C. § 103. We respectfully traverse.

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The Examiner's summary of the pertinent teachings of the references and their combination is well taken. Schwarz, as modified, would indeed appear to teach a system for supplying a variety of consumers at different temperature levels. The system would have one or more energy sources, forward and return lines, and a controllable distributor device (Schwarz). Further, the system would have devices for storing thermal energy (McGregor, Bradshaw).

The secondary reference McGregor has a "Remote Heat Storage Area" (an elongate trench with heat storage capability) and a cooling source (a "negative heat" source or "capacity to do cooling" with a heat exchanger and a cooling fluid) and a "Remote Cold Storage Area." Similarly, the secondary reference Bradshaw has a "Warm Temp. Thermal Storage Tank" and a "Cold Temp. Thermal Storage Tank." In other words, both of the secondary references have only one heat storage device and one cold storage device. Heat energy, again, must be understood relative to the consumer's requirement as a medium which, upon heat exchange at the consumer, will deliver heat. Conversely, cooling energy will take away heat from the heat exchange at the consumer. In the circuits of prior art of record, there is one heat reservoir and one "cold reservoir."

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This is different in the claimed invention. Here, we have a plurality (two or more) heat reservoirs which are provided for delivering heat at +Q for heat exchange at the consumer. In addition, these heat reservoirs are connected in parallel with the consumers at different temperature levels. These different temperature levels are not just simply one heat consumer and one cooling consumer, as in Bradshaw and McGregor, but they are different temperature levels for heat consumption. It goes without saying that, in the instant invention, a "cooling storage device" may be provided in addition.

Claim 1 is not obvious over the art of record.

The rejection of claim 5 has been reviewed as well. The further reference UK 2014297 and its teaching concerning the energy supply in the wall is acknowledged. The further reference does not, however, cure the failure of the primary combination to render claim 1 obvious. That is, UK 2014297 does not provide for a plurality of heat reservoirs or heat storage devices for supplying heat at different temperature levels. Claim 5 is therefore patentable over the art of record.

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In summary, none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-8 are solicited.

If an extension of time for this paper is required, petition for extension is herewith made.

Respectfully submitted,



For Applicant(s)

WHS:bh

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